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BOOK OF ABSTRACTS

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(Abstracts that are missing have not been submitted)

SERUM LEVELS OF sCD44v5 IN PSORIATIC ARTHRITIS (PsA)

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Objective: Elevated serum levels of sCD44v5 have been described in rheumatoid arthritis (RA) reflecting the clinical course and severity of disease. With respect to PsA sCD44v5 may also play a role in the pathophysiology and clinical course of the disease.
Methods: In 37 patients with PsA and psoriasis vulgaris and in 74 patients with erosive, IgM-rheumatoid factor positive RA (RA+), according to the criteria of ARA, serum levels of sCD44v5 were measured. We used a commercially available ELISA-kit (developed at Bender MedSystems Vienna), that detect sCD44v5 according to the manufacturers instructions.
Results: Elevated serum levels (>58 ng/ml) of sCD44v5 could be detected in 9/37 (24%) patients with PsA and in 40/74 patients with RA+. In the PsA-group sCD44v5-levels ranged from 16-109ng/ml (median: 36ng/ml) and in the RA+group they ranged from 10-226ng/ml (median: 65ng/ml). Elevated sCD44v5 in PsA correlates with longstanding disease and increased CRP-levels.

sCD44 v5:	PsA < 58 ng/ml n=28 (76%)	PsA >58 ng/ml n=9 (24%)
male/female ratio	19/9	9/0
Age (years) median (range)	52 (28-69)	52 (43-71)
Duration of disease (years)	5 (3-10)	13 (9-18)
CRP (mg/l) median (range)	16 (3-77)	51 (27-98)
Elevated CRP level (>12m/l)	15 (54%)	9 (100%)
Steroid therapy	7 (25%)	1 (11%)
MTX treatment	14 (50%)	2 (22%)
Cyclosporin A	5 (18%)	0
NSAID	26 (93%)	9 (100%)

Conclusion: Even in PsA elevated serum levels of sCD44v5 could be a sign of self-defence of the organism against inflammatory agents and a marker of the severity of disease as described in RA+ patients.

359 THE EFFECT OF THE HYPERTHERMIA (SAUNA) ON THE IMMUNOLOGICAL AND HORMONAL INDEXES IN RHEUMATOID ARTHRITIS

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It was studied the effects of hyperthermia (sauna) on the some cell-mediated immunity and a number of hormonal indexes 3 times: before the procedure, just at the end of it and one hour later. The study population was composed of 52 patients with rheumatoid arthritis (RA). The study was performed in the sauna with temperature 80° C and relative humidity of the air 25%. The patients were in the hot room 20 minutes (twice per 10 minutes divided by interval of 5 minutes).
The must noticeable change was found in quantity of somatotropin. It's level was increased from 2.57±0.80 ng/ml in the beginning of the procedure up to 8.73±2.40 ng/ml at the end of it. The percentage T-suppressions and the level of other hormonal indexes were changed multidirectional to the end of the procedure with tendency to normalization in one hour.
The change of the immunological indexes after the thermotherapy testified immunomodulation action of the hyperthermia by RA.
The increase of the level of somatotropin, thyroxine, triiodthyronine and decreased of the level of the hydrocortisone after taking sauna allow us to bind the medicinal influence of this procedure with intensification of the basal metabolism, anabolic and antistress effects.

360 SENSITIVITY OF PERIPHERAL BLOOD MONONUCLEARS TO APOPTOSIS INDUCTION IN SLE.

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Cocultivation of mitogen-activated (not resting) mononuclears isolated from peripheral blood of healthy persons with epythelial cells of HTSC cell line derived from human thymus results in lymphocyte apoptosis. It was registered by electrophoresis and flow cytometry. In 8 from 9 investigated cases mononuclear blood cells from SLE patients showed decreased apoptosis. Proliferative T-cell response on PHA decreased by dose-dependent manner in the presence of HTSC cells. Cell dose required for inducing of 50% decline of response on PHA was calculated. It was found to be of 4800 per 10^5 mononuclears for donors' blood cells, 3600 - for SLE patients' cells with normal response on PHA and 180700 - with low PHA-response. Thus sensitivity to apoptosis induction in SLE patients was dramatically decreased in the cases of low mitogen response. Expression of CD95 (Fas, receptor of apoptogenic signals) was nearly equal in the donors' and SLE patients' mononuclears. Monoclonal antibody to CD95 introduced into culture of cells responding on T-cells' mitogens (PHA, anti-CD3) enhanced or suppressed cell proliferation depending on effect of mitogen: low responses were increased and high responses were decreased. So then T-cell apoptosis induction depends on the level of cell activation and the decrease of the induced apoptosis in SLE usually is accompanied by lowed activation of T-cells by mitogens.

361 ANTIVIRAL EFFICACY OF INTRAVINOUS IMMUNOGLOBULIN IN THE TREATMENT OF SYSTEMIC FORMS OF JUVENILE RHEUMATOID ARTHRITIS

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The purpose-to assess antiviral effect of immunoglobulin (IG) in the treatment of systemic forms of juvenile rheumatoid arthritis (JRA). 34 patients with systemic forms of JRA were treated with IG (Sandoglobulin-Sandos Pharma LTD, Pentaglobin, Intraglobin-Biotest in the dasage 0,4-0,6 g/kg three times every other day). The drags were used in patients with mixed bacterial-viral infection, accompanied diseases relapses of severe treatment refractory JRA. Examination of representative group of viruses (Coxacy A,B, Entero 68-71, Polyomiyelitis, CMV. Herpes ets) was done before and in 7-10 days after IVIG treatment. Friquency of viral antigens in urine cells and morphometric index of viral activity were measured. The examination revealed mixed (mainly Coxacy) infection in 100% of patients before treatment. The average index of expression of viral infection was 13,0. This index statistically significantly decreased(5,2, P<0,001) after IVIG administration .But friquency of viral infection was still high, it was revealed in 75% of patients. Clinical effect of IVIG therapy was consedered as .very good in 41%, good in 44% and satisfactory in 9% of patients. In 6% of children IVIG treatment was without affect. Connection of IVIG clinical efficacy and decrease in expression of viral infection inderectly reflect it^s role in atiology of systemic forms of JRA.